

## **An equation for describing the enthalpy of nonspecific solvation of nonelectrolytes**

Solomonov B., Novikov V., Solomonov A.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### **Abstract**

An equation describing the enthalpy of nonspecific solvation of nonelectrolytes in various solvents was obtained as a result of an analysis of literature data and the data obtained by the present authors. The equation contains half as many parameters as the linear solvation energy relations and is based on experimental enthalpies of solvation in cyclohexane and tetrachloromethane. The equation also applies to the enthalpies of solution. The results obtained with the use of the new equation are compared with the experimental data on three solvents (benzene, ethyl acetate, and dimethylformamide). For several compounds, the equation was used to calculate their enthalpies of specific interactions with solvents. The results are compared with the enthalpies of complex formation cited in the literature.

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